

well developed thorax and long wing covers, the tail of the abdomen tapering to rather a prolonged blunt point; in colour of a darkish warm brown, darkest on the thorax and anal point, the surface of the wing-covers and lower rings of the abdomen shining.

Emsworth: *July 12th*, 1881.

NOTES ON THE SPECIES OF *OPHTHALMOPHORA*, A GENUS OF GEOMETRID MOTHS.

BY ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

The genus *Ophthalmophora* was founded by M. Guenée in the first volume of his "Uranides et Phalénites," for the reception of six beautiful species of moths, having upon the upper surface of their wings metallic, golden and silver lines and ocelli: the first three of the species described are supposed, though with doubt, to be from Brazil; none of them appear to be in the British Museum, though allied to *O. elysiata*.

The fourth species recorded by M. Guenée is *O. corinnaria*, a very pretty little species allied to *O. formosanta* of Cramer, and, if I am correct in my identification of the latter species, more nearly allied than M. Guenée supposed: unfortunately, we possess no examples of the genus from Surinam, but, judging from an example of what I take to be *O. formosanta*, obtained by Dr. Trail on the Rio Negro, I should say that the chief differences in M. Guenée's species were the less defined (sometimes even obliterated) pale costal border to the primaries, and the distinctly ocelloid character of the oval marginal spot of the secondaries.

If we set aside the close affinity of *O. corinnaria* to *O. formosanta*, which must, for the present, be open to question, the next point for consideration is, whether it is possible to separate specifically the form described and figured by Herr Snellen under the name of *O. lyonetaria*.

Herr Snellen says that *O. lyonetaria* "is distinguished from all the recognised species by the clear dark grey front wings with unicolorous front margin;" in two specimens of *O. corinnaria* which we have from Santarem, one has a whitish costal border as in Guenée's figure, the other has lost it as in Snellen's figure; yet, in every other respect, the two examples are almost identical; such being the case, I cannot think that the two so-called "species" are more than sports of one type.

Allied to the above is a beautiful little species, formerly in Mr. Norris' collection, from Limas—

Ophthalmophora bella, sp. n.

Primaries above rusty chocolate-brown, transversely streaked with greyish or sericeous whity-brown; costal border silvery-white, the striæ upon the costal area being also white; extreme edge of costal margin slightly yellowish; an arched sub-basal silvery-white line; a broad extremely oblique belt, its inner two-thirds silvery-white, and its outer third pale creamy-buff, from the inner margin to the second median branch, where it joins a slightly curved transverse grey stripe, which runs to the sub-costal vein; fringe creamy-white; secondaries silver-grey, densely irrorated with chocolate-brown, excepting at the borders; base chocolate-brown, bounded by a broad pearly-white band; apical border, from costa to second sub-costal branch, white, fringe creamy-buff; a forked, shining, metallic, opaline, tin-like band from the costa, its outer fork sub-marginal and bounding the apical patch, its inner fork terminating abruptly at the radial vein; between these forks is a conspicuous black ocellus with buff iris and crescent-like mother-of-pearl centre; a sub-marginal, embossed, plumbageous spot, with pink reflections, on the lower radial interspace, and therefore just beyond the apical sub-marginal forked tin-like band; this spot is followed by four pure silvery sub-marginal spots; fringe of this part of the wing of the same pale grey as the border; abdominal border sparsely spangled with shining opaline scales; body grey, abdomen narrowly banded with white; antennæ cream-coloured, with yellow inner margin: under-surface pure white; primaries, with the discoidal and apical areas, grey, and the costa pale buff; legs pale buff.

Expanse of wings, 1 inch, 4 lines.

Limas.

This beautiful little species is one of the links between the *O. formosanta* group and *O. amabilis* of Cramer, with which two types M. Guenée concludes his enumeration of the species of this genus.

Of the two forms described subsequently by Mr. Walker, *O. elysiata* comes nearer to *O. formosanta*, whereas, *O. danaeata* forms the type of a third group, having a series of four well-defined ocelli across the secondaries.

Nearest to *O. elysiata*, but also apparently allied to *O. alectaria* of Guenée, is a handsome new species recently received from Rio Janeiro—

Ophthalmophora Lucilla, sp. n.

Primaries above dull ferruginous, discoidal area sparsely mottled with small white striæ; costal border grey, densely striated with white, the edge creamy-white; fringe chrome-yellow; an oblique abbreviated band from the centre of the inner margin to the first median branch; white internally, bright yellow and widely diffused externally, bounded within by a dull blackish angulated stripe, which runs upwards to the lower radial vein, its extremity being interrupted by a small tapering triangular yellow spot; two metallic plumbageous spots on the median interspaces; secondaries yellow, densely irrorated with dull ferruginous; base greyish-brown, limited by an

oblique sub-basal white stripe, continuous with the oblique band of the primaries; fringe yellow; outer border ochreous, with ferruginous marginal line; an embossed, macular, sub-marginal, metallic, tarnished silver stripe, which curves round at apex so as almost to enclose a large, pale, rust-red patch, in the centre of which is a highly embossed, golden, ocellid spot, with black edge and brown edged yellow iris; an irregular, almost W-shaped, series of scattered shining gold scales on the internomedian area; body grey, abdomen with narrow white margins to the segments and a white basal band; under-surface cream-colour, the outer half of the primaries and the external area of the secondaries washed with stramineous; a dusky marginal line; fringe yellow; primaries with bright ochreous costal border; interno-basal and discoidal areas slightly greyish; apical area and outer border broadly greyish-brown; secondaries with the sub-marginal stripe and ocellus of the upper-surface represented by grey spots.

Expanse of wings, 1 inch, 6 lines.

Rio Janeiro.

The *Phrygionis pallicosta* of Felder and Rogenhofer (a specimen of which we have from Limas) is, I think, nearer to *Byssodes* than to *Ophthalmophora*, and the *Phalæna hilaria* of Cramer, referred to the latter genus with doubt by Walker, does not seem to me to have anything in common with it.

The species of the genus will, therefore, now stand as follows:—

1. *Ophthalmophora danaeata*, Walker. Santarem. Brit. Mus.
2. " *elysiata*, " Ega. "
3. " *Lucilla*, Butler. Rio Janeiro. "
4. " *alectaria*, Guenée. Brazil?.
5. " *pamphilaria*, " "
6. " *lyllaria*, " "
7. " *formosanta*, Cramer, Surinam. Rio Negro. Brit. Mus.
8. " { *corinnaria*, Guenée. } Santarem. Brit. Mus.
 { *var. lyonetaria*, Snellen.* }
9. " *bella*, Butler. Limas. Brit. Mus.
10. " *amabilis*, Cramer. Surinam. Pará. Brit. Mus.
11. " ? *pallicosta*, Felder. French Guyana. Limas. Brit. Mus.

British Museum:

May, 1881.

Black form of Amphidasis betularia at Gainsborough.—It may interest your readers to know that I have taken three specimens of this black variety here. The third specimen I took this morning at rest on the walls of my house. I am not aware that this form of the insect had previously been recorded as occurring in this locality.—F. M. BURTON, Highfield, Gainsborough: June 27th, 1881.

* Described as from Jamaica.